Mobility-as-a-Service (MaaS) and Ride-hailing

IT-TRANS 2020: Exhibitors present digital solutions for urban mobility (Part 1)

Karlsruhe, November 7, 2019 – Worsening urban traffic congestion, inadequate mobility provision in rural areas and climate change demand alternative mobility solutions. Public transport options are becoming more varied as new offerings such as ride-hailing are being added. This calls for stronger networking of the individual means of transport. At the same time, passengers are demanding greater individuality and convenience. Intermodal travel has to be easy. Only then will passengers be willing to contribute to a sustainable mobility concept by using alternative means of transport instead of or in addition to their own cars. IT-TRANS is showing sustainable passenger-centric urban mobility solutions at the fair in Karlsruhe from March 3 to 5, 2020.

moovel provides access to various mobility options and mobile ticketing

moovel (becomes REACH NOW) – one of the five Mobility Joint Ventures of the BMW Group and Daimler AG – is a Mobility as a Service pioneer and wants to make cities more livable through efficient mobility solutions. moovel transit products offer white label solutions that enable public transport ticketing directly via smartphones. Karlsruhe is the first city to use this mobile ticketing solution. It’s possible to search for and book rental bikes and tickets from the local transit agency (KVV) directly in the app. moovel also offers an on-demand platform for public transport so people have a true demand-oriented option for getting around at any time of the day or night. This platform can be used singularly or in combination with moovel transit. The service also features smart routing and pooling, creating efficient solutions for passengers and operators alike. At IT-TRANS 2018 moovel tested an on-demand ride-sharing service together with KVV as a pilot project.

Holistic software solution for on-demand-mobility

The field-tested AnSaT® system combines the different operating concepts of on-demand ride-sharing, line-oriented demand responsive transport and transportation with fixed and flexible stops. An intelligent algorithm ensures efficient pooling of incoming bookings with optimized routing. Bookings are quickly summarized and compared with available parameters. Feasibility can
be assessed even as the booking is taking place. Passengers can order by phone or book via the internet or an app. Transfer of the booking to the performing company can be customized to suit operating conditions. The mobile ticket printer offers ticket printing right in the vehicle. Integration of on-demand mobility in the existing public transport network is ensured by excluding parallel transport, linking connections and integrating tariffs, among other things. There are also interfaces to various timetable information systems, ITCS systems and taxi systems.

**Siemens Mobility family represents MaaS solutions from modules to a mobility marketplace**

Munich based Siemens Mobility has teamed up with subsidiaries HaCon, Bytemark and eos.uptrade and partner Padam Mobility to offer digital services and solutions ranging from modules and holistic systems to a complete mobility marketplace. They include Mobility as a Service solutions as well as individual components for intermodal trip planning, real-time information for passengers on the move, mobile ticketing and payment. Fleet management, timetable planning and the integration of demand-responsive transport (DRT) are fundamental elements. Mobility data analytics uses data to generate added value for transport providers and travelers.

**Account-based intermodal mobility from Cityway**

As one of the leading lights on the MaaS B2G market, Cityway based in Aix-en-Provence (F) offers applications and services for multimodal information, booking, ticketing and mobility optimization. The intermodal real-time route planner and APIs integrate all forms of mobility in a given area: walking, cycling, public transport, trains, ferries, private cars, sharing systems, demand-responsive transport, first mile/last mile solutions, real-time traffic reports and parking. A fares calculator is integrated. Booking and ticket validation for public transport are accessed from a single login. All Cityway solutions are open and can be integrated in any other open system modules via standardized APIs. At IT-TRANS, Cityway is presenting the first multimodal account-based ticketing system in Europe, using Mulhouse in France as an example, with integrated booking, usage and payment.

**Flexible adaptation: on-demand bus service**

Utopian Future Technologie (UFT) is a tech company developing innovative solutions for the shared-mobility sector. It works closely with public transit authorities and operators to make public transport the preferred transport mode in low-density areas through demand-responsive transportation services. At IT-
TRANS, it will showcase its DRT platform, demonstrating how to design, plan and operate an on-demand bus service. Product demonstrations show how easy it is to custom design an on-demand service.

**Multimodal platforms for municipalities**

As a municipal service provider owned by Wiener Linien and Wiener Stadtwerke, Upstream Mobility offers products and services focused on the public interest. The company primarily targets municipalities, cities and (large) regions and offers individual development solutions for multimodal MaaS providers. Upstream is presenting its MaaS platform which is open to all public and private mobility providers. This supports multiple front ends or apps which can in turn compete with each other in the market.

**Internet of Things for bus and rail**

GeoMobile from Dortmund, Germany, presents ivanto, a system solution comprising a smartphone app, vehicle router with wifi connection and a fleet management portal for the public transport companies. It enables a Bluetooth infrastructure to be established between public transport vehicles and the smartphone app. It also allows vehicle and traffic data to be collected and analyzed. The aim is to make mobility accessible, multimodal and user-friendly.

**MaaS platform for seamless intermodal travel**

The versatile HAFAS MaaS platform from HaCon in Hanover, Germany combines data and interfaces from a wide variety of transport providers in a single trip planner covering public and private transport, demand-responsive services (DRT), car sharing providers, taxis, bike and pedestrian routing and road traffic information. The centerpiece of the platform is the intermodal trip planner which suggests the smartest combination of transport options based on individual user preferences. HAFAS then calculates the best price across all the modes of transport and tariff zones. The HAFAS business solutions ensure smooth operation: software for gathering and distributing real-time information and systems for disruption management.

**DISCLAIMER**

The published articles express the personal opinions of the authors (exhibitors of IT-TRANS) and in no way represent the views of the International Association of Public Transport (UITP) or Messe Karlsruhe. Some slight amendments might have been made to the articles provided by the exhibitors. Status: As of November 2019. Subject to alterations.
Photos and captions

**Caption moovel:** Karlsruhe is the first city to use the mobile ticketing solution from the moovel Group. In addition to offering tickets for the local public transport network, it can be used for example to search for and book rental bikes from the app. The on-demand ride-sharing service had its pilot phase during IT-TRANS 2018.
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**Caption EMS:** The AnSaT® system works with an intelligent planning algorithm which ensures efficient pooling of incoming bookings with optimized routing.
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**Caption Siemens:** Intermodal travel has to be easy if passengers are to be persuaded to use alternative means of transport instead of or in addition to their own cars – Siemens Mobility is presenting suitable digital solutions at IT-TRANS.
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**Caption Cityway:** Best practice from Cityway in Mulhouse, France – mobility account with intermodal transport
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**Caption UFT:** DRT technology makes it easy to create an on-demand service and synchronize it with the existing bus routes
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**Caption Upstream:** The MaaS platform from community IT service provider Upstream is open to all public and private mobility providers
Copyright: Upstream

**Caption GeoMobile:** Passengers can request stops via the ivanto app
Copyright: GeoMobile

**Caption HaCon:** The intermodal trip planner from HaCon determines the best combination of the various transport options – on show at IT-TRANS.
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